

WHAT IS CLAIMED IS:

1. A circuitry configuration for an electromagnetic regeneration valve for venting a tank of a motor vehicle, the regeneration valve being actuatable by pulse-width modulation and including a solenoid, the circuitry configuration comprising:
  - a power source for supplying the solenoid with electricity;
  - a control unit for generating pulse-width-modulated signals;
  - a switching device, the solenoid capable of receiving the pulse-width-modulated signals of the control unit via the switching device; and
  - a suppression device for suppressing high induced voltages at the solenoid.
2. The circuitry configuration as recited in claim 1, wherein the suppression device includes a free-wheeling diode connected in parallel to the solenoid.
3. The circuitry configuration as recited in claim 1, wherein the regeneration valve is actuatable in a proportional mode with a pulse frequency of between 20 Hz and 200 Hz.
4. The circuitry configuration as recited in claim 3, wherein the regeneration valve is actuatable with a pulse frequency of about 50 Hz.
5. The circuitry configuration as recited in claim 1, wherein the power source includes the vehicle's electrical system.
6. The circuitry configuration as recited in claim 1, wherein the control unit includes the engine controller.
7. The circuitry configuration as recited in claim 1, wherein the switching device includes a power transistor.
8. The circuitry configuration as recited in claim 7, further comprising a further diode connected in parallel to the power transistor.